٠, ١

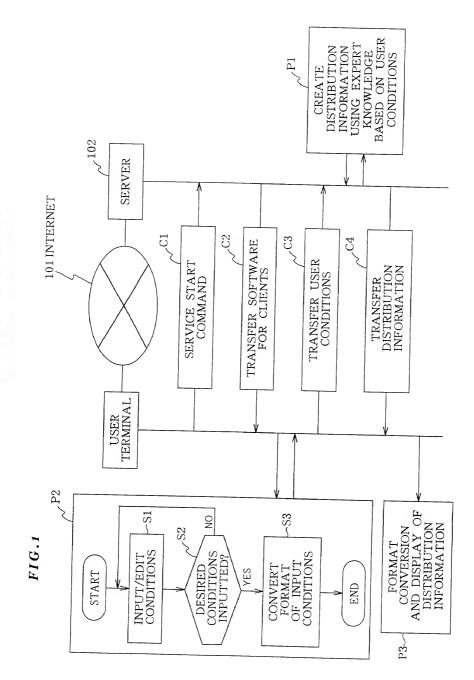
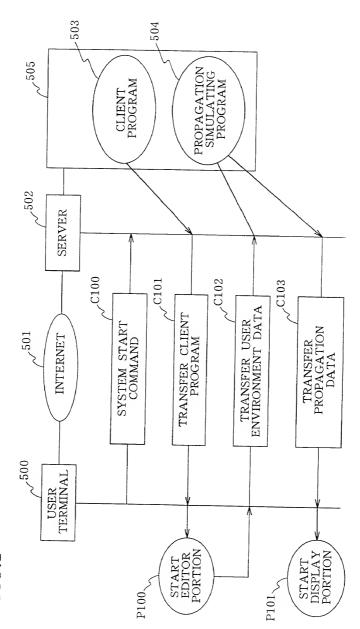


FIG. 2





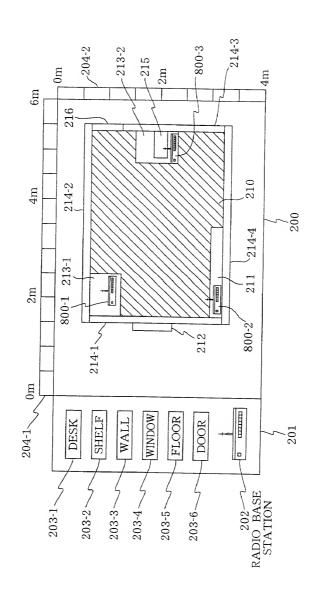
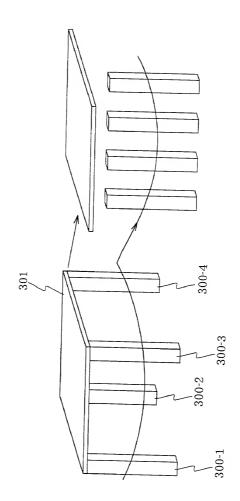


FIG.4





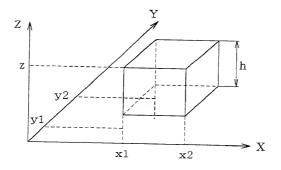


FIG.6

| | PO | SITION | MATERIAL | | | |
|------------|------------|--------|----------|------|------|----------|
| x 1 | x 2 | у1 | у2 | z | h | MAIERIAL |
| 1.5 | 2.1 | 1.2 | 1.2 | 1.2 | 0.05 | METAL |
| 1.5 | 1.6 | 1.2 | 1.3 | 1.15 | 0.8 | TIMBER |
| : | ÷ | ÷ | ÷ | i. | ÷ | : |
| 2.0 | 2.1 | 1.2 | 1.3 | 1.15 | 0.8 | TIMBER |

FIG.7

| POSIT | ΓΙΟΝ(M | ETER) | ANTENNA | SENDING ELECTRIC |
|-------|--------|-------|---------|---------------------|
| x | у | Z | | POWER |
| 3.0 | 1.5 | 1.0 | DIBALL | 100mW |

FIG. 8

| | | | | בתום של | AECERTI ELECTRIC POWER |
|----------------|--------------------------------|-------------------------|----------------------------------|----------------------|---|
| | POSSIBLE | GOOD | VERY GOOD | VERY GOOD | RECEIPT ELECTRIC POWER THRESHOLD VALUE 3 |
| | POSSIBLE | G00D | VERY GOOD | VERY GOOD | |
| | IMPOSSIBLE | POSSIBLE | G00D | GOOD | IPT RECEIPT FRIC ELECTRIC FOWER HOLD THRESHOLD TE 1 VALUE 2 |
| ARIANCE | IMPOSSIBLE | | POSSIBLE | POSSIBLE | RECEIPT ELECTRIC POWER THRESHOLD VALUE 1 |
| DELAY VARIANCE | DELAY VARIANCE THRESHOLD | VALUE 3 DELAY VARIANCE | THRESHOLD VALUE 2 DELAY VARIANCE | THRESHOLD VALUE 1 | 1 |

FIG.9

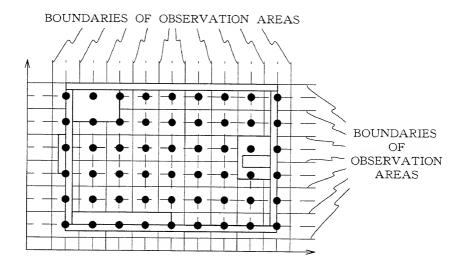


FIG.10

| OBSE | RVATI | ON AR | EA | | |
|--------------------------|-------|------------|-------|-------|------------------------------|
| HEIGHT ABOVE FLOOR | x1 | x 2 | y1 | у2 | COMMUNICATION POSSIBILITY |
| | 0 cm | 10 cm | 0 cm | 10 cm | IMPOSSIBLE |
| 100 cm | 0 cm | 10 cm | 10 cm | 20 cm | POSSIBLE |
| | 0 cm | 10 cm | 20 cm | 30 cm | GOOD |
| | 0 cm | 10 cm | 30 cm | 40 cm | VERY GOOD |
| | • | • | • | • | • |

FIG.11

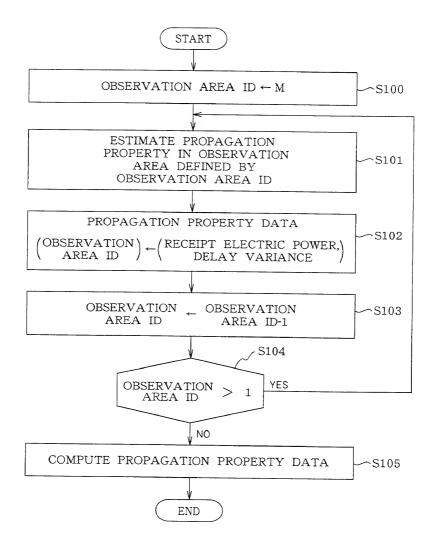


FIG.12

| OBSERVATION AREA ID | RECEIPT ELECTRIC POWER | DELAY VARIANCE |
|------------------------|------------------------------|-------------------|
| 1 | -60 dBm | 20 NANOSECONDS |
| 2 | -65 dBm | 150 NANOSECONDS |
| 3 | -68 dBm | 30 NANOSECONDS |
| 4 | -72 dBm | 200 NANOSECONDS |
| 5 | -88 dBm | 20 NANOSECONDS |
| • | : | • |
| M | | |

FIG.13

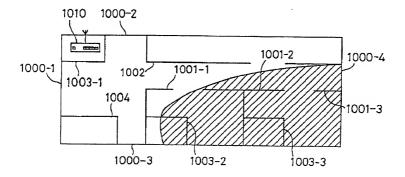


FIG.14

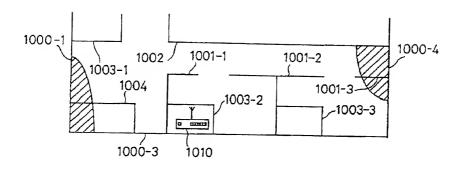


FIG.15

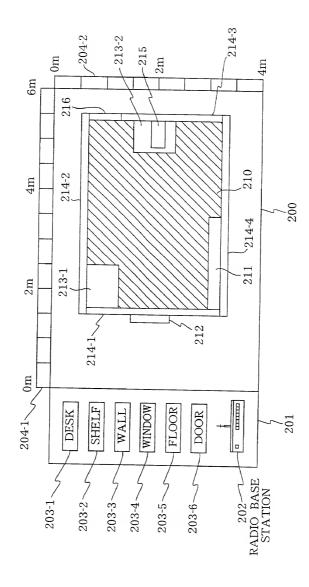
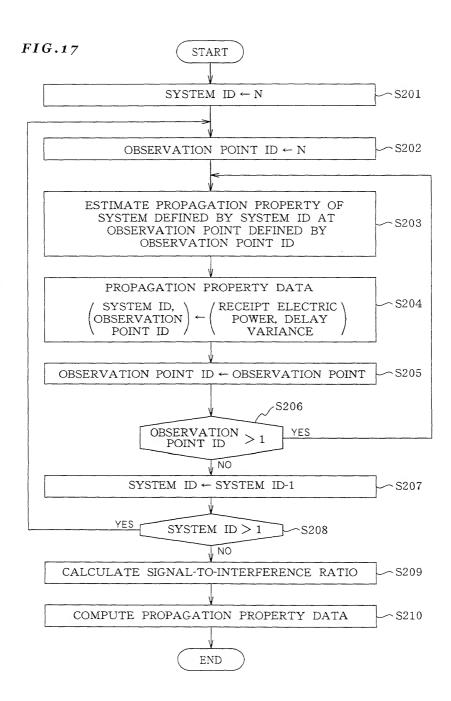


FIG.16

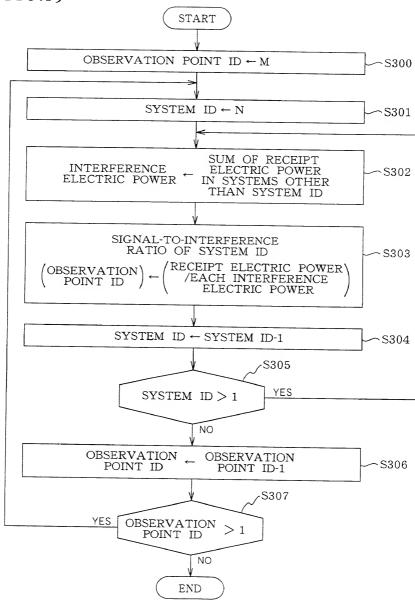
| TYPE OF SYSTEM | POSI | POSITION (METER) | TER) | ANTENNA | SENDING |
|----------------------------|------|------------------|------|---------|-------------------|
| | × | y | Z | | ELECTRIC POWER |
| HIGH SPEED WIRELESS LAN | 2.0 | 1.0 | 1.0 | DIBALL | 100 mW |
| SHORT RANGE RADIO | 3.0 | 2.0 | 1.0 | DIBALL | 1 mW |
| MICROWAVE OVEN | 1.0 | 1.5 | 1.0 | | 20 mW |



716.18

| [ID=3 | DELAY VARIANCE | 120 NANO SECONDS | 80 NANO SECONDS | 80 NANO SECONDS | 100 NANO SECONDS | 80 NANO SECONDS | •••• | |
|-------------|------------------------------|------------------------|------------------------|-----------------------|------------------------|-----------------------|---------|---|
| SYSTEM ID=3 | RECEIPT ELECTRIC POWER | -88 dBm | -90 dBm | -88 dBm | -86 dBm | -88 dBm | • • • | |
| SYSTEM ID=2 | DELAY VARIANCE | 20 NANO SECONDS | 40 NANO SECONDS | 80 NANO SECONDS | 60 NANO SECONDS | 20 NANO SECONDS | • • • • | |
| SYSTEN | RECEIPT ELECTRIC POWER | 88 dBm | -88 dBm | -70 dBm | -88 dBm | -70 dBm | • • • | |
| SYSTEM ID=1 | DELAY VARIANCE | 20 NANO SECONDS | 150 NANO SECONDS | 30 NANO SECONDS | 200 NANO SECONDS | 20 NANO SECONDS | • • • • | |
| SYSTE | RECEIPT ELECTRIC POWER | -60 dBm | -65 dBm | –68 dBm | -72 dBm | -88 dBm | • • • • | |
| | OBSERVATION POINT ID | | 2 | ಣ | 4 | വ | • • • • | M |





| | | т | | , | | | | | | |
|--|--|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---|---|---|---|
| | TOTAL IN- IN- CI DIVIDUAL DIVIDUA RATIO CI RATIO (I D=2) | 0dB | -2dB | -18dB | 2dB | -18dB | . | | • | |
| D=3 | IN- DIVIDUAL CI RATIO (ID=1) | -28dB | -25dB | -20dB | -14dB | 0dB | | • | • | |
| SYSTEM ID=3 | TOTAL CI RATIO | -28dB | -25dB | -22dB | -14dB | -18dB | | | • | |
| SYS | TOTAL INTER- FERENCE ELECTRIC POWER | -60dBm | -90dBm -65dBm -25dB -25dB | -88dBm -66dBm -22dB -20dB | -86dBm -72dBm -14dB -14dB | -88dBm -70dBm -18dB | | • | • | |
| | RECEIPT TOTAL TO POWER FERENCE RAPECTING PARTICULAR PROPERIOR PROPERIOR PROPERIOR PROPERIOR PROPERIOR PARTICULAR PARTIC | -88dBm -60dBm -28dB -28dB | | -88dBm | -86dBm | | | • | • | |
| | IN- DIVIDUA CI RATIO (ID=3) | 9po | 2dB | 18dB | -2dB | 18dB | | | • | |
|)=2 | TOTAL IN- IN- CI DIVIDUAL DIVIDUA E RATIO CI RATIO CI RATIO (ID=3) | -28dB | -23dB | -2dB | -16dB | 18dB | | | • | |
| SYSTEM ID=2 | TOTAL CI RATIO | -28dB | -23dB | -2dB | -16dB | 15dB | | • | | |
| SAS | TOTAL INTER- FERENCE ELECTRIC POWER | -60dBm | -65dBm -23dB | -68dBm | -72dBm | -85dBm | | | | |
| | RECEIPT TOTAL ELECTRIC INTER-POWER FERENCE ELECTRIC POWER POWER | 28dB -88dBm -60dBm -28dB | -88dBm | -70dBm -68dBm | -88dBm -72dBm -16dB | -70dBm -85dBm | • | • | • | |
| | IN- DIVIDUA CI RATIO (ID=3) | 28dB | 25dB | 20dB | 14dB | 0dB | | • | • | |
| D=1 | TOTAL IN- IN- CI DIVIDUAL DIVIDUA (PATIO CI RATIO CI RATIO (ID=3) | 28dB | 23dB | 2dB | 16dB | -18dB | | | • | |
| SYSTEM ID=1 | TOTAL CI RATIO | 25dB | 21dB | 2dB | 12dB | -18dB | | • | | |
| SYS | TOTAL INTER- FERENCE ELECTRIC POWER | -60dBm -85dBm | -65dBm -86dBm 21dB | 68dBm -70dBm | 72dBm -84dBm 12dB | -88dBm -70dBm -18dB -18dB | • | • | | |
| | RECEIPT ELECTRIC POWER | -60dBm | -65dBm | -68dBm | -72dBm | -88dBm | • | | • | |
| i di | OBSERVATION POINT ID | - | 2 | 8 | 4 | 5 | | | | Δ |

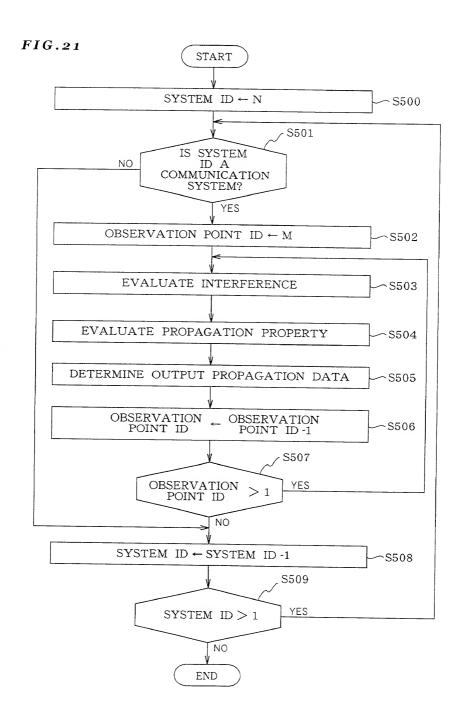


FIG.22

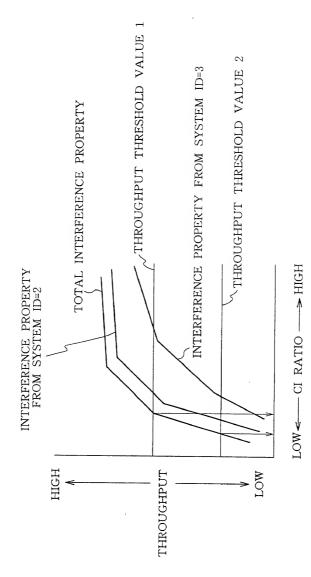


FIG.23

| HBILITY | SYSTEM ID=3 | В | C | D | A | • | • (| • • |
|---------------------------|-------------------------------------|-----------------------|------------------------|------------------------|------------------------|-----|-----|-----|
| COMMUNICATION POSSIBILITY | SYSTEM ID=1 SYSTEM ID=2 SYSTEM ID=3 | A | D | C | В | • | • • | • |
| COMMUI | SYSTEM ID=1 | O | А | D | В | • | • • | • |
| | y2 | 10 cm | 20 cm | 30 cm | 40 cm | • | | • |
| | y1 | 0 cm 10 cm 0 cm 10 cm | 0 cm 10 cm 10 cm 20 cm | 0 cm 10 cm 20 cm 30 cm | 0 cm 10 cm 30 cm 40 cm | • | • • | • |
| REA | x2 | 10 cm | 10 cm | 10 cm | 10 cm | • | • • | • |
| ION A | x1 | 0 cm | 0 cm | 0 cm | 0 cm | • | | • |
| OBSERVATION AREA | OBSERVATION POINT ID | - | 2 | 8 | 4 | • • | • • | • |
| | HEIGHT ABOVE FLOOR | | - 1 | 100 cm | | | | |

| INTERFERENCE DEGRADATION LEVEL RECEIPT POSSIBILITY | LARGE | MIDDLE | SMALL |
|--|-------|--------|-------|
| VERY GOOD | D | В | A |
| GOOD | D | С | В |
| POSSIBLE | D | D | С |
| IMPOSSIBLE | D | D | D |

| COLOR NUMBER | NAME |
|-----------------|-------------------------|
| CL000 | LIGHT RED |
| CL001 | LIGHT YELLOW |
| CL002 | LIGHT GREEN |
| CL003 | LIGHT BLUE |
| CL004 | SLIGHTLY DARK RED |
| CL005 | SLIGHTLY DARK YELLOW |
| CL006 | SLIGHTLY DARK GREEN |
| CL007 | SLIGHTLY DARK BLUE |

| COLOR NUMBER | NAME |
|-----------------|---------------------|
| CL008 | SEMI-DARK RED |
| CL009 | SEMI-DARK YELLOW |
| CL010 | SEMI-DARK GREEN |
| CL011 | SEMI-DARK BLUE |
| CL012 | DARK RED |
| CL013 | DARK YELLOW |
| CL014 | DARK GREEN |
| CL015 | DARK BLUE |

DELAY VARIANCE

| DELAY VARIANCE | CL015 | CL011 | CL007 | CL003 | | | |
|---|-------------|-------|-------|------------------------------|--|--|--|
| THRESHOLD VALUE 3 DELAY VARIANCE | CL014 CL01 | | CL006 | CL002 | | | |
| THRESHOLD VALUE 2 DELAY VARIANCE | CL013 CL009 | | CL005 | CL001 | | | |
| THRESHOLD VALUE 1 | CL012 | CL008 | CL004 | CL000 RECEIPT ELECTRIC | | | |
| RECEIPT RECEIPT POWER ELECTRIC ELECTRIC POWER POWER THRESHOLD THRESHOLD VALUE 1 VALUE 2 VALUE 3 | | | | | | | |

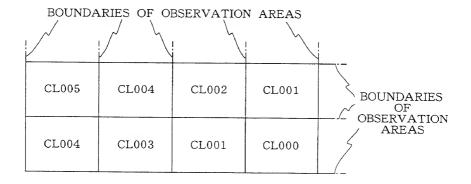


FIG.28

| 110.20 | | | | | | | |
|-----------------|-------------------------------------|--|--|--|--|--|--|
| COLOR NUMBER | NAME | | | | | | |
| CL000 | RED | | | | | | |
| CL001 | YELLOWISH RED | | | | | | |
| CL002 | REDDISH YELLOW YELLOW BLUISH YELLOW | | | | | | |
| CL003 | | | | | | | |
| CL004 | | | | | | | |
| CL005 | YELLOWISH BLUE | | | | | | |
| CL006 | BLUE | | | | | | |
| CL007 | GREENISH BLUE | | | | | | |

| COLOR NUMBER | NAME |
|-----------------|---------------|
| CL008 | BLUISH GREEN |
| CL009 | GREEN |
| CL010 | REDDISH GREEN |
| CL011 | GREENISH RED |
| CL012 | PALE RED |
| CL013 | PALE YELLOW |
| CL014 | PALE GREEN |
| CL015 | PALE BLUE |

DELAY VARIANCE

| DELAY VARIANCE | CL006 | CL007 | CL008 | CL009 |
|---|-------|-------|-------|-------|
| THRESHOLD VALUE 3 DELAY VARIANCE | CL005 | CL015 | CL014 | CL010 |
| THRESHOLD VALUE 2 DELAY VARIANCE THRESHOLD VALUE 1 | CL004 | CL013 | CL012 | CL011 |
| | CL003 | CL002 | CL001 | CL000 |

RECEIPT RECEIPT RECEIPT
ELECTRIC ELECTRIC
POWER POWER
THRESHOLD THRESHOLD
VALUE 1 VALUE 2 VALUE 3

RECEIPT ELECTRIC POWER

FIG.30

| INTERFERENCE DEGRADATION LEVEL RECEIPT POSSIBILITY | LARGE | MIDDLE | SMALL |
|--|-------|--------|-------|
| VERY GOOD | CL002 | CL001 | CL000 |
| GOOD | CL006 | CL005 | CL004 |
| POSSIBLE | CL010 | CL009 | CL008 |
| IMPOSSIBLE | CL014 | CL013 | CL012 |

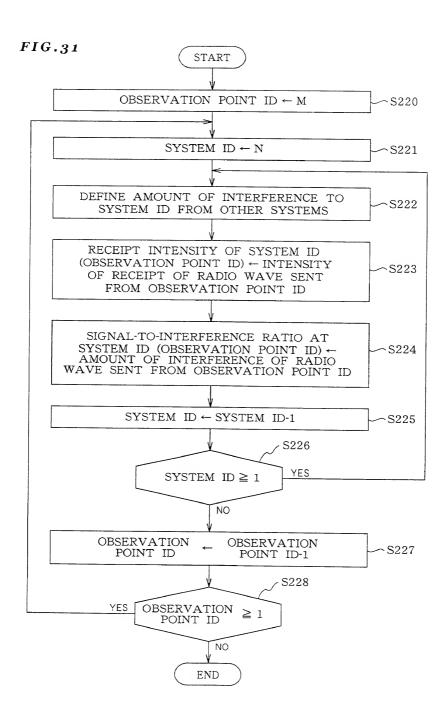


FIG.32

| SYSTEM ID=2 | | | • | • | • | | | | |
|-------------|-------------------------------------|---------|---------|---------|---------|---------|-----|---|---|
| | • | • | | • | | • | | | |
| | SENDING POINT CI RATIO | 10 dB | 5 dB | 2 dB | -2 dB | -18 dB | • • | • | |
| SYSTEM ID=1 | RECEIPT ELECTRIC POWER | -60 dBm | -65 dBm | -68 dBm | -72 dBm | -88 dBm | • • | • | |
| | N TOTAL INTERFERENCE ELECTRIC POWER | -70 dBm | • • | • | |
| | OBSERVATION POINT ID | | 2 | က | 4 | 2 | • • | • | M |

| 3 | - |
|--------|-----|
| | |
| 900 | 100 |
| - | 4, |
| = | 100 |
| 1 | 1.3 |
| ė | 1 |
| .11116 | 100 |
| Ξ | |
| 907 | 2.5 |
| -11111 | 1 |
| | 100 |
| | T |
| THE P | 7 |
| | d |

| SVSTEM ID=9 | | | | | | | The second secon | | | FIG.33 |
|--------------|--|--------------------------------------|-----------------|----------------|---------------|-----------------|--|-------|---|---|
| | MIN (TOTAL CI RATIO, SENDING POINT CI RATIO) | INTERFERENCE DEGRADATION LEVEL | 10 dB MIDDLE | 5 dB LARGE | 2 dB LARGE | -2 dB LARGE | -18 dB LARGE | ••• | | INTERFERENCE DEGRADATION LEVEL FOR TWO-WAY COMMUNICATION BETWEEN SENDING POINT IDENTIFIABLE BY SYSTEM ID AND EACH OBSERVATION POINT |
| t-dr Mamorro | TOTAL CI RATIO | EZ | 25 dB SMALL | 21 dB SMALL | 2 dB SMALL | 12 dB MIDDLE | -18 dB LARGE | • • • | | INTERFERENCE DEGRADATION LEVEL FOR ONE-WAY COMMUNICATION OF SENDING POINT IDENTIFIABLE BY SYSTEM ID→EACH OBSERVATION POINT |
| | SENDING POINT | INTERFERENCE DEGRADATION LEVEL | 10 dB MIDDLE | 5 dB LARGE | 2 dB LARGE | -2 dB LARGE | -18 dB LARGE | • • • | | INTERFERENCE DEGRADATION LEVEL FOR ONE-WAY I COMMUNICATION OF EACH OBSERVATION POINT-INTERFERENCE DEGRADATION LEVEL OF SENDING POINT ID ENTIFIABLE BY SYSTEM ID |
| | DBSERVATION POINT ID | | 1 | 2 | 3 | 4 | 5 | • • • | M | INTER DEGR DEGR LEVEL F COMMUN EACH O POINT→IN DEGRAD! OF SENDI ENTIF |



